

## NETWORK NEBRASKA SUPPORT SERVICES

Processes and Procedures, 8-17-07

We are offering up this document to describe a possible memorandum of understanding between Network Nebraska Operations (UNCSN, CIO, NET) and the network participants concerning network support services, distance learning and network diagnostics, and escalation pathway for unresolved problems.

### I. Shared responsibilities of the involved entities:

**ESU and higher education entities**—Primary help desk support and trouble ticket routing for distance learning and basic network outages; origination of trouble tickets, team resolution of trouble tickets

**Nebraska Educational Telecommunications**—Secondary help desk support and trouble ticket routing; NVCN operations; satellite network operations

**University of Nebraska Computing Services Network**—Secondary help desk support and trouble ticket routing; Statewide network monitoring, diagnostics and bandwidth management, including edge devices, routing, and Internet access; service provider contacts; after hours help desk support; resolution of escalated network trouble tickets

**Office of the Chief Information Officer**—Statutory authority for network deployment; equipment/infrastructure procurement and contracts; administrative fees; cost recovery model; NVCN network; and Renovo server hosting and support; resolution of escalated Renovo trouble tickets

**Distance Education Council**—Overall coordination with K-12 and higher education entities; providing policy guidance to manage overall backbone bandwidth demand and video course exchange

### II. Trouble ticket and Helpdesk technology:

GWIC Support Helpdesk software: [http://www.gwi.com/content/csupport\\_windows.aspx](http://www.gwi.com/content/csupport_windows.aspx)  
(web-based)

Toll-free Telephone Number with caller I.D and automatic call forwarding: 1-888-NET-NEBR (638-6327)

E-mail Address: [info@networknebraska.net](mailto:info@networknebraska.net)

### III. Network Nebraska Staffing:

M-F, 7:30am-7:30pm: NET Helpdesk

M-F, 7:30pm-7:30am: UNCSN (automatic 1-888-NET-NEBR rollover to 402-472-**7373**)

Saturday-Sunday-Holidays: UNCSN (automatic 1-888-NET-NEBR rollover to 402-472-**7373**)

### IV. Process for contacting Helpdesk and subsequent work flow:

#### **Primary (Level 1) Helpdesk support during normal business hours:**

A) User **calls** ESU/higher education technician; Technician creates a c.Support trouble ticket who then attempts to resolve the problem and close the ticket; or

B) User **e-mails** ESU/higher education technician; Technician creates a c.Support trouble ticket who then attempts to resolve the problem and close the ticket; or

- C) User **creates** a web-based c.Support trouble ticket that has automatic routing back to ESU/ higher education Technician team who then attempts to resolve the problem and close the ticket; or
- D) User (if no response from ESU or higher ed staff) **calls** 1-888-NET-NEBR or e-mails [info@networknebraska.net](mailto:info@networknebraska.net) and NET Helpdesk or UNCSN Helpdesk then creates a c.Support trouble ticket which is routed directly back to the respective ESU/higher education technician or team who then attempts to resolve the problem and close the ticket.

### **Secondary (Level 2) Helpdesk support during any hours:**

*(If Level 1 Helpdesk intervention is unsuccessful, then)*

- A) Technician escalates and routes c.Support trouble ticket or calls 1-888-NET-NEBR or e-mails [info@networknebraska.net](mailto:info@networknebraska.net) and NET or UNCSN Helpdesks escalate the c.Support trouble ticket which is routed to:
  - a. UNCSN for networking diagnostics and problem resolution (edge devices, wide area networking, backbone, Internet access, routing)
  - b. CIO's Office for Renovo Server support and problem resolution (application server, DNS server, SQL server)
  - c. Regional DL Coordinator for videoconferencing diagnostics and problem resolution (codecs, displays, room integration, audio and video problems)

*(If ESU/Higher education technician discovers a problem that cannot be solved, then)*

- B) ESU/Higher education technician creates a c.Support trouble ticket which is escalated to:
  - a. UNCSN for networking diagnostics and problem resolution (edge devices, wide area networking, backbone, Internet access, routing)
  - b. CIO's Office for Renovo Server support and problem resolution (application server, DNS server, SQL server)
  - c. Regional DL Coordinator for videoconferencing diagnostics and problem resolution (codecs, displays, room integration, audio and video problems) who may immediately contact their videoconferencing vendor

### **Tertiary (Level 3) Helpdesk support during 8am-5pm Next Business Day**

*(If Level 2 problem resolution is not successful, then)*

- A) Appropriate ESU/higher education or Network Nebraska staff member contacts the appropriate vendor for problem resolution and/or equipment replacement

### **V. Trouble Ticket Creation:**

- A) ESU Network Operations Staff, Distance Learning Coordinators after receiving an end-user complaint or discovering a problem
- B) Higher education Network Operations Staff, Distance Learning Coordinators after receiving an end-user complaint or discovering a problem
- C) Network Nebraska staff (NET, UNCSN, CIO's Office), after receiving an end-user complaint or discovering a problem
- D) Building technology coordinator or distance learning teacher, using web interface into c.Support on each ESU website or higher education website

VI. Trouble Ticket Resolution and Escalation:

- A) Resolution at the lowest level of contact possible
- B) Initial response to trouble ticket originator by next business day
- C) Consistent progress communication back to the trouble ticket originator until problem is resolved
- D) Searchable knowledge base of past trouble ticket problems/resolutions

VII. c.Support Technician Log-Ins:

- A) ESU Network Operations Committee members
- B) ESU Distance Learning Coordinators
- C) Higher education Network Operations staff
- D) Higher education Distance Learning Coordinators
- E) Distance Education Council Executive Director
- F) NET Helpdesk and Videoconference Monitoring Staff
- G) UNCSN Network Operations Staff
- H) CIO's Office--Server Support Team

VIII. Outbound contact system in case of widespread interruption of service or anticipated down time

- A) NET's Helpdesk will contact affected entities using e-mail alerts; or
- B) CIO's Office Helpdesk will contact affected entities using e-mail alerts; or
- C) UNCSN Network Operations Staff will contact affected entities using e-mail alerts

IX. c.Support "Categories", routing procedures, and contact database

- A) Developed in cooperation with all the involved entities